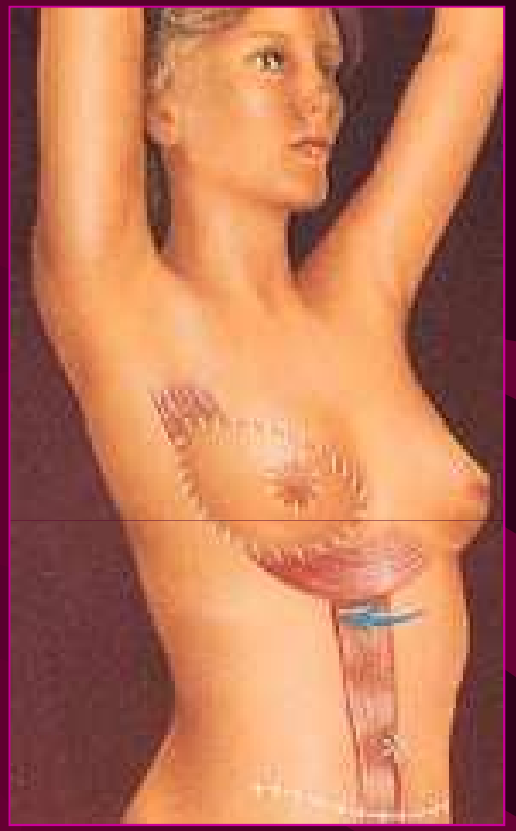
Diagnosis Coding For Staged Breast Reconstruction Encounters



ICD-9-CM Coordination and Maintenance Committee
September 28, 2007

Background

Breast reconstruction after mastectomy is typically staged, taking place over months or even years. It can involve several or all of the following procedures:

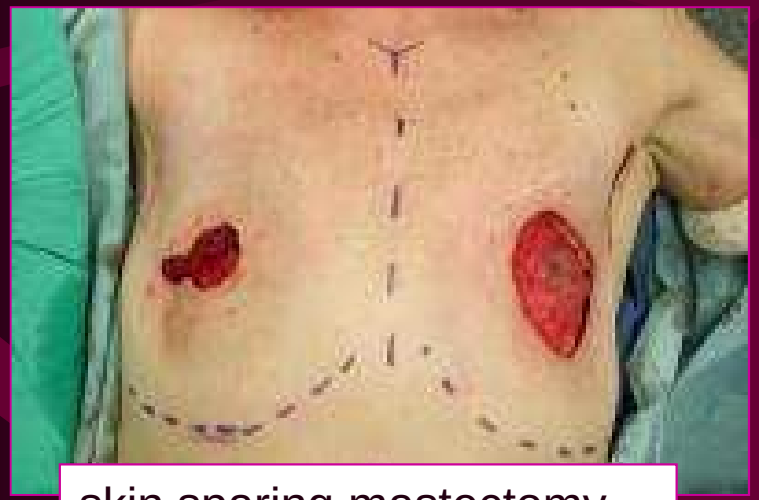
- Insertion of tissue expander
- Breast mound reconstruction by tissue graft
- Removal of tissue expander
- Insertion of permanent breast implant
- Revisions to reconstructed breast
- Balancing procedures to native breast
- Nipple reconstruction
- Areolar tattooing

Some procedures are performed in separate encounters, others may take place during the same operative session.

Post-Mastectomy Tissue

Which procedures a patient requires depends to some extent on how much tissue remains after mastectomy.

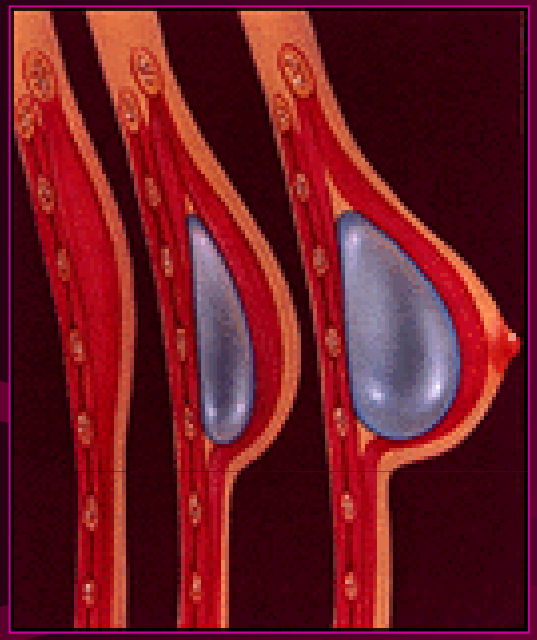
If there is sufficient tissue, immediate reconstruction may be performed by placing a permanent implant. Or, if additional tissue is needed, a tissue expander may be placed or a graft may be performed.



skin sparing mastectomy…

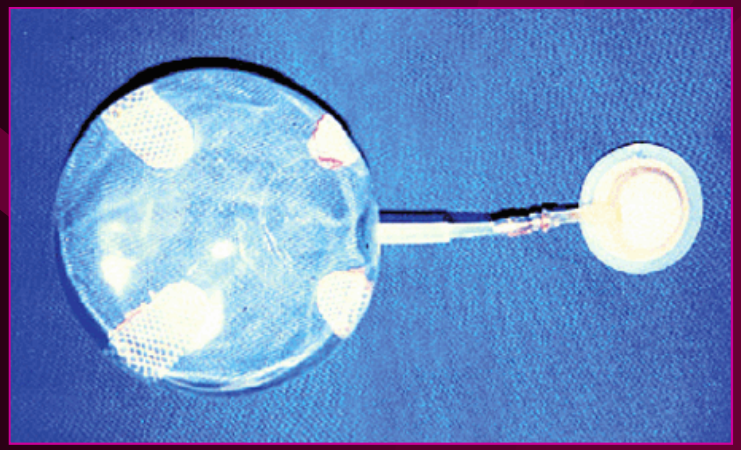
with tissue expander insertion

Tissue Expanders

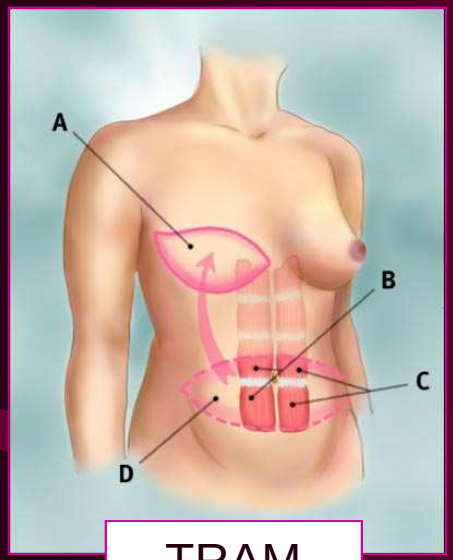


When additional tissue must first be developed, a tissue expander is placed in the chest wall and filled through a port at regular intervals to stretch out the skin.

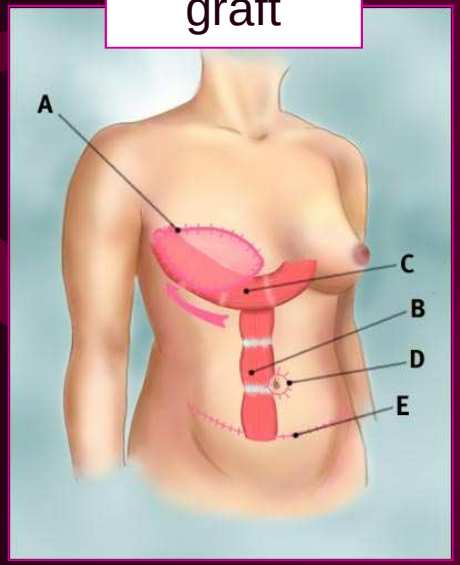
Some expanders are designed to be left in, but most are removed and replaced with a permanent implant.



Tissue Grafts

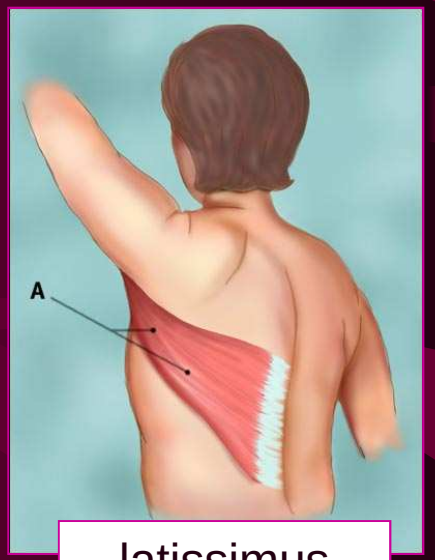


TRAM graft

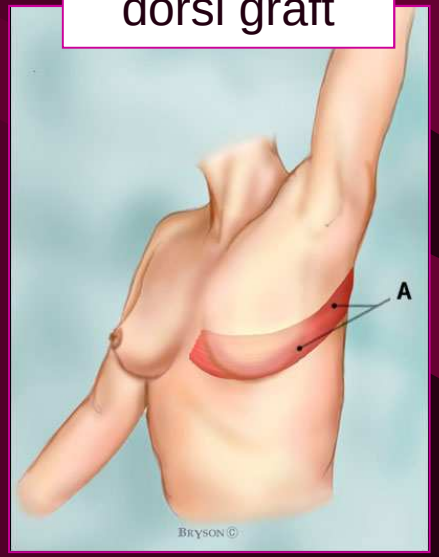


Tissue grafts are used when more bulk is needed to reconstruct the breast mound. A TRAM flap transfers tissue from the lower abdominal wall, a latissimus dorsi flap tissue from the back.

Although the transferred tissue alone may be sufficient, an implant can also be placed underneath.



latissimus dorsi graft



Exchange of Tissue Expander for Implant

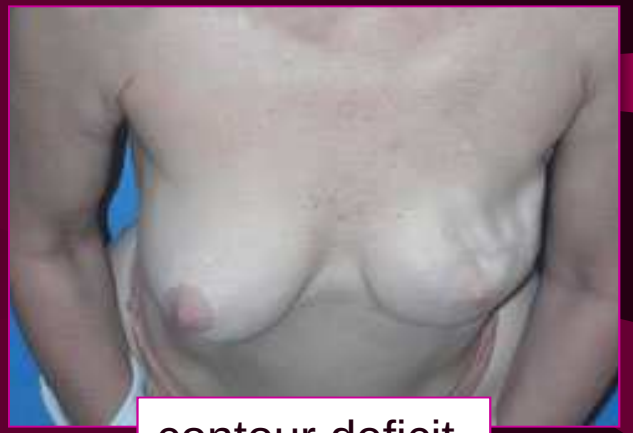
After the tissue expander has been fully expanded, it is removed and replaced by a permanent implant, typically during the the same encounter. Implants are filled with either saline or silicone. Many models are available to try to match the patient's natural contours.

Because the expander is a foreign body, it's normal for a capsule to form around it in the breast. Adjustments to the capsule are often necessary to seat the permanent implant properly.

Revision of Reconstructed Breast

It is not uncommon for the reconstructed breast to require surgical revision at some point. This can be necessary because of “contour deficits”, such as: irregularity or deformity in the reconstructed tissue; inadequate projection; and asymmetry or disparity with the native breast.

Surgeons are usually adamant that these issues are in the nature of breast reconstruction and do not represent complications of the graft or implant.

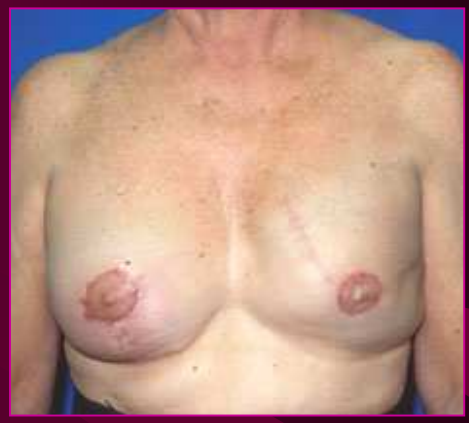


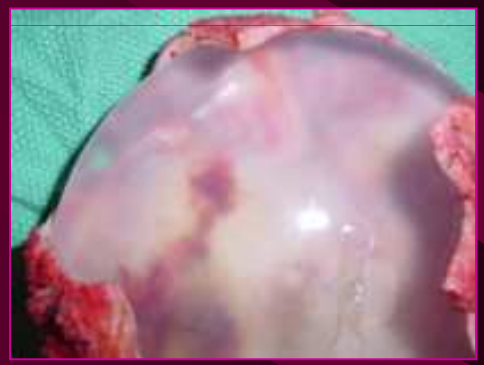
contour deficit

asymmetry

Revision for Complications

Unlike contour deficits, asymmetry and the like, capsular contracture is a complication of the implant. A thin capsule forms around all implants. Contracture is when the capsule thickens abnormally and forms scar tissue around the implant, becoming hard and painful. Capsular contracture may require capsulotomy or capsulectomy of the reconstructed breast.

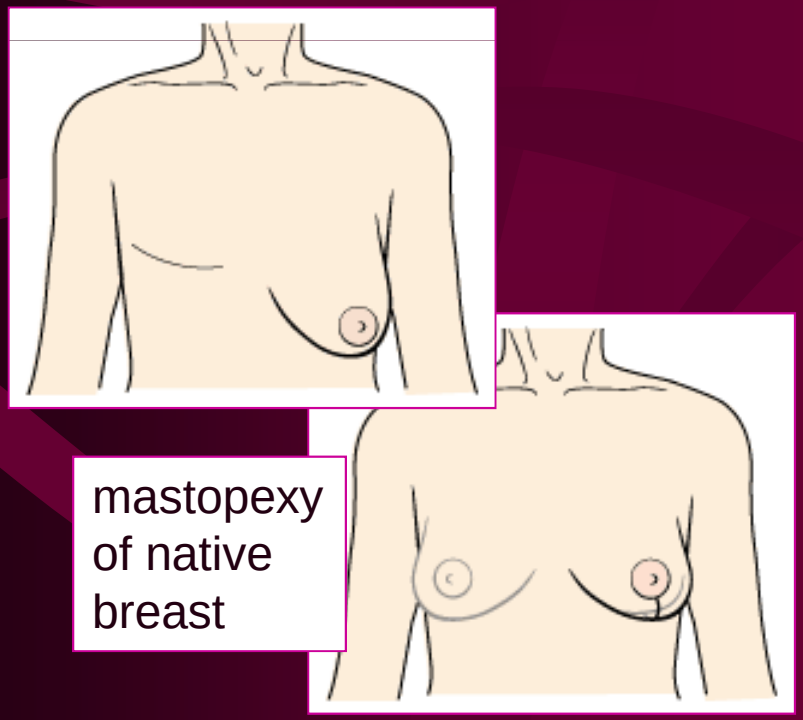




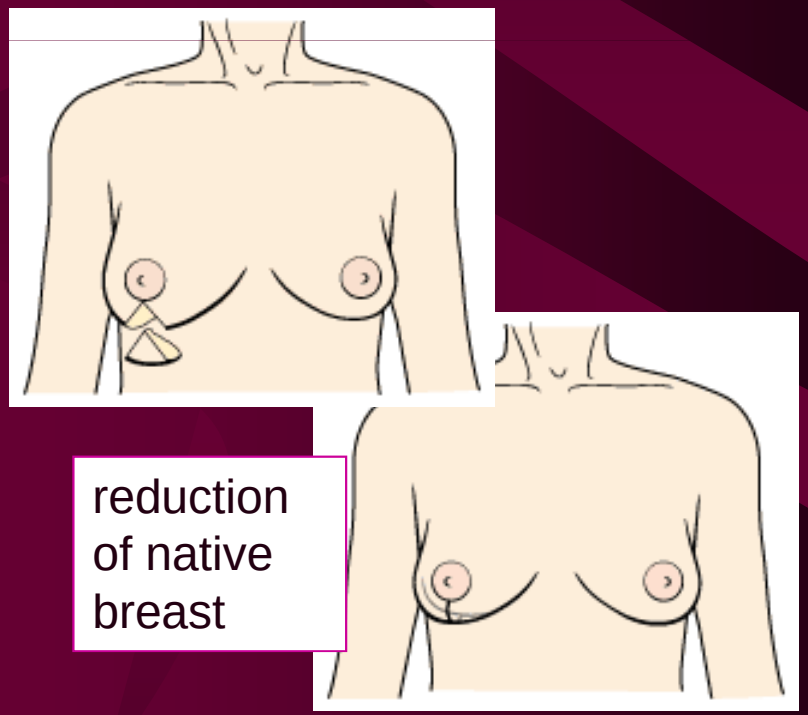
Fat necrosis is a complication of TRAM flaps. Fat within the flap becomes ischemic due to inadequate blood supply. It hardens and must usually be excised.

Balancing Procedures to Native Breast

As an alternate to revising the reconstructed breast, or sometimes in addition to it, procedures are also performed on the native breast. This includes augmentation, reduction, and mastopexy of a smaller, larger or ptotic native breast for balance with the reconstructed breast.



mastopexy of native breast

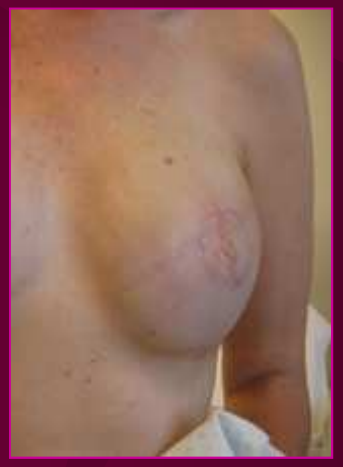


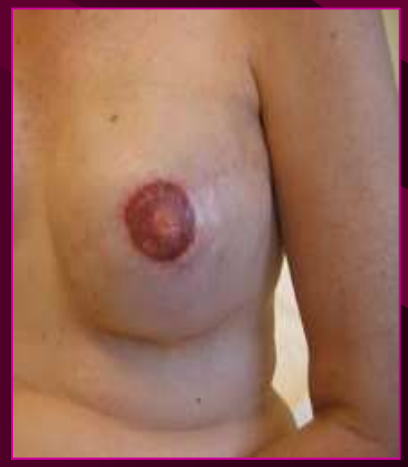
reduction of native breast

Nipple and Areolar Reconstruction

Nipple reconstruction is usually performed via skin grafts. Common techniques include the skate flap, top-hat flap, and star flap. Nipple reconstruction is usually delayed for several months after breast mound reconstruction, to allow the new breast time to settle.

Areolar reconstruction can also be performed by grafting, though tattooing is much more common.





Diagnosis Coding

What ICD-9-CM diagnosis codes should be assigned at the different stages of reconstruction?

It's usually clear when to assign diagnosis codes for breast cancer as well as for device and graft complications. For the more routine staged procedures, diagnosis code options include:

611.8	other breast disorder
V45.71	acquired absence of breast
V51	aftercare involving plastic surgery
V52.4	fitting and adjustment of breast prosthesis and implant

Each of the possible codes has drawbacks and issues.

Issues in Diagnosis Coding

611.8	other breast disorder
V45.71	acquired absence of breast
V51	aftercare involving plastic surgery
V52.4	fitting/adjustment of breast prosthesis/implant

- can 611.8 can be assigned for reconstructed breasts?
- at what stage in the reconstruction process is code V45.71 no longer applicable?
- V51 is a non-specific code according to Official Guidelines
- what is the actual intent of V52.4?
- what code is appropriate for nipple reconstruction?
- what code is appropriate when balancing procedures are performed on otherwise healthy native breasts?

One Possibility

- Use V45.71 for all encounters in which the breast mound is still being reconstructed, eg. grafting, insertion of TE or implant, expander exchange for implant
- Use 611.8 plus V10.3 for subsequent revisions, eg. contour corrections, and for balancing procedures on the native breast
- Use V51 for nipple reconstruction
- Reserve V52.4 for elective implant exchange, eg. for a different material or size

New and revised codes are being proposed to clarify the issues and promote consistency in diagnosis coding at all stages.

A Philosophical Note

The point of breast reconstruction following mastectomy is obviously not to restore function. But it doesn't need to be. The point of breast reconstruction is to make the patient whole again.

It has only been within the last 20 years or so that breast reconstruction, including revisions and balancing procedures, has been consistently viewed as non-cosmetic. In developing new and revised codes, we should be mindful not to inadvertently recreate barriers for breast cancer patients.